CLAIMS

A compound of the compounds of the formula I

10

15

20

wherein R^1 is hydrogen, (C_1-C_6) alkyl, aryl, heteroaryl, arylmethyl or heteroarylmethyl, wherein said aryl and heteroaryl and the aryl and heteroaryl moieties of said arylmethyl and said heteroarylmethyl can optionally be substituted with one or more substituents, preferably with from zero to two substituents, independently selected from hydrogen, halo, hydroxy, nitro, amino, cyano $-C(=O)-O-(C_1-C_6)$ alkyl, (C_1-C_6) alkyl- $C(=O)-(C_1-C_6)$ alkyl, -C(=O)H, -C(=O)NR 4 R 5), (C_1-C_6) alkyl optionally substituted with from one to three fluorine atoms, and (C_1-C_6) alkoxy optionally substituted with from one to three fluorine atoms;

 R^2 and R^3 are independently selected from hydrogen and (C₁-C₆)alkyl; or R^2 and R^3 , taken together, may form a saturated carbocyclic ring containing from 3 to 6 ring carbon atoms;

 R^4 and R^5 are independently selected from hydrogen and (C_1 - C_6)alkyl; or R^4 and R^5 , taken together, may form a saturated carbocyclic ring containing from 3 to 6 ring carbon atoms; and

X and Y are independently selected from hydrogen, halo, hydroxy, nitro, amino, cyano $-C(=O)-O-(C_1-C_6)$ alkyl, (C_1-C_6) alkyl- $C(=O)-(C_1-C_6)$ alkyl, -C(=O)H, -C(=O)NR 4 R 5), (C_1-C_6) alkyl optionally substituted with from one to three fluorine atoms, and (C_1-C_6) alkoxy optionally substituted with from one to three fluorine atoms;

and the pharmaceutically acceptable salts of such compounds.

- 2. A compound according to claim 1, wherein R¹ is hydrogen and X and Y are selected from hydrogen and methyl.
- 3. A compound according to claim 1 wherein X and Y are selected from 25 hydrogen and $(C_1\text{-}C_6)$ alkyl.
 - 4. A compound according to claim 1, wherein such compound is selected from the following compounds and their pharmaceutically acceptable salts:

1-[6-(Pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;

3-{4-[6-(Pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazin-1-yl}-propan-1-ol;

30 1-Methyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;

1-Ethyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;

1-Benzyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;

```
1-Propyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
             1-(2-Methoxy-ethyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
              1-Benzo[1,3]dioxol-5-ylmethyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
              1-(2-Phenoxy-ethyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
              1-(3-Phenoxy-propyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
5
              1-(3-Phenyl-propyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
              1-Butyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
              3-{4-[6-(Pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazin-1-yl}-propionitrile;
              4-{4-[6-(Pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazin-1-yl}-butyronitrile;
              1-(3-Methyl-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
10
              1-(3-Chloro-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
              3-{4-[6-(Pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazin-1-ylmethyl}-benzonitrile;
              2-{4-[6-(Pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazin-1-ylmethyl}-benzonitrile;
              4-{4-[6-(Pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazin-1-ylmethyl}-benzonitrile;
              1-(3-Fluoro-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
15
              1-(4-Fluoro-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-(3-Methoxy-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl-piperazine;
               1-(2-Chloro-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-(4-tert-butyl-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-(2-Fluoro-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
20
               1-(2-Bromo-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-Isopropyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-Cyclopropyl-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-(1-Methyl-hexyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-[6-(2-Methyl-pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
 25
               4-(6-Piperazin-1-yl-pyridin-2-yloxymethyl)-quinoline;
               1-[6-(3-Methyl-pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-[6-(2-Phenyl-pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine;
               1-[6-(2,6-Dimethyl-pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine; and
               1-(4-Fluoro-benzyl)-4-[6-(pyridin-4-ylmethoxy)-pyridin-2-yl]-piperazine.
 30
                        A pharmaceutical composition for treating a disorder or condition selected
```

5. A pharmaceutical composition for treating a disorder or condition selected from depression, anxiety, avoidant personality disorder, premature ejaculation, eating disorders (e.g., anorexia nervosa and bulimia nervosa), migraine, premenstrual syndrome, premenstrual dysphoric disorder, seasonal affective disorder, bipolar disorder, jet lag, sleep disorders such as circadian sleep rhythms disorder, sleep deprivation, REM sleep disorders, hypersomnia, parasomnias, sleep-wake cycle disorders, sleep disorders associated with blindness, sleep disorders associated with obesity, narcolepsy and sleep disorders associated

35

with shift work or irregular work schedules; nocturnal enuresis, and restless legs syndrome in a mammal, comprising an amount of a compound according to claim 1, or a pharmaceutically acceptable salt thereof, that is effective in treating such disorder or condition, and a pharmaceutically acceptable carrier.

5

10

15

20

25

30

35

- 6. A method for treating a disorder or condition selected from depression, anxiety, avoidant personality disorder, premature ejaculation, eating disorders (e.g., anorexia nervosa and bulimia nervosa), migraine, premenstrual syndrome, premenstrual dysphoric disorder, seasonal affective disorder, bipolar disorder, jet lag, sleep disorders such as circadian sleep rhythms disorder, sleep deprivation, REM sleep disorders, hypersomnia, parasomnias, sleep-wake cycle disorders, sleep disorders associated with blindness, sleep disorders associated with obesity, narcolepsy and sleep disorders associated with shift work or irregular work schedules; nocturnal enuresis, and restless legs syndrome in a mammal, comprising administering to a mammal in need of such treatment an amount of a compound according to claim 1, or a pharmaceutically acceptable salt thereof, that is effective in treating such disorder or condition.
- 7. A pharmaceutical composition for treating a disorder or condition selected from depression, anxiety, avoidant personality disorder, premature ejaculation, eating disorders (e.g., anorexia nervosa and bulimia nervosa), migraine, premenstrual syndrome, premenstrual dysphoric disorder, seasonal affective disorder, bipolar disorder, jet lag, sleep disorders such as circadian sleep rhythms disorder, sleep deprivation, REM sleep disorders, hypersomnia, parasomnias, sleep-wake cycle disorders, sleep disorders associated with blindness, sleep disorders associated with obesity, narcolepsy and sleep disorders associated with shift work or irregular work schedules; nocturnal enuresis, and restless legs syndrome in a mammal, comprising a serotonin 7 receptor partial agonizing effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 8. A method for treating a disorder or condition selected from depression, anxiety, avoidant personality disorder, premature ejaculation, eating disorders (e.g., anorexia nervosa and bulimia nervosa), migraine, premenstrual syndrome, premenstrual dysphoric disorder, seasonal affective disorder, bipolar disorder, jet lag, sleep disorders such as circadian sleep rhythms disorder, sleep deprivation, REM sleep disorders, hypersomnia, parasomnias, sleep-wake cycle disorders, sleep disorders associated with blindness, sleep disorders associated with obesity, narcolepsy and sleep disorders associated with shift work or irregular work schedules; nocturnal enuresis, and restless legs syndrome in a mammal, comprising administering to a mammal requiring such treatment a serotonin 7 receptor partial agonizing effective amount of a compound according to claim 1 or a pharmaceutically acceptable salt thereof.